COURSE DETAIL

COMPARATIVE CELL BIOLOGY

Country

United Kingdom - England

Host Institution

University College London

Program(s)

University College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

131

UCEAP Course Suffix

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UCEAP Official Title

COMPARATIVE CELL BIOLOGY

UCEAP Transcript Title

COMPARATVE CELL BIO

UCEAP Quarter Units

6.00

UCEAP Semester Units

Course Description

In this course, lectures are delivered by research-leaders in evolutionary cell biology, genetics, molecular cell biology, and ageing to provide a comprehensive understanding of cell function at the level of genome organization, gene regulation, proteome management, metabolic homeostasis and adaptive responses across different cell types and organisms (bacteria, archaea, fungi, plants, worms, planaria, tardigrades, fish, rodents and humans). By focusing on these areas of cell biology, the course then examines the similarities and differences in cell function across domains, kingdoms and species by discussing: 1) the cell biology behind specializations in cell function, 2) differences in the biology behind plant and animal cells, 3) the evolution of cell-type specificity and multicellular species, 4) organism-specific adaptive responses and 5) changes in function between young and old cells. In addition, students have the opportunity to conduct an independent mini research project in which they contribute to a real-world ongoing experiment aimed at understanding how cells respond to the presence of toxic proteins.

Language(s) of Instruction

English

Host Institution Course Number

BIOL0052

Host Institution Course Title

COMPARATIVE CELL BIOLOGY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Division of Biosciences